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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,464	02/17/2004	Srinivasa Madhyastha	14233.15USU1	1780
23552	7590	12/08/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			KAM, CHIH MIN	
			ART UNIT	PAPER NUMBER
			1656	
DATE MAILED: 12/08/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/781,464

Applicant(s)

MADHYASTHA, SRINIVASA

Examiner

Chih-Min Kam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 12-14 are pending.

Applicant's amendment filed September 9, 2005 is acknowledged, and applicants' response has been fully considered. Claim 12 has been amended, and claims 1-11 and 15-34 have been cancelled. Therefore, claims 12-14 are examined.

### ***Priority***

2. Applicant's submission of foreign priority document, Canadian patent application, 2,452,032, filed September 9, 2005 is acknowledged. However, the application number of this Canadian application has not been provided in the Application Data Sheet (ADS), filed February 17, 2004. Thus, submission of an ADS containing this information is required.

### **Withdrawn-Informalities**

3. The previous objection to the specification is withdrawn in view of applicant's submission of a new set of the drawings, applicant's amendment to the specification, and applicant's response at pages 4-5 in the amendment filed September 9, 2005.

### **Withdrawn-Claim Rejections - 35 U.S.C. § 112**

4. The previous rejection of claims 1-11 and 32-34 under 35 U.S.C. § 112, first paragraph, is withdrawn in view of applicant's cancellation of the claim, and applicant's response at pages 5-6 in the amendment filed September 9, 2005.
5. The previous rejection of claim 10 under 35 U.S.C. § 112, second paragraph, is withdrawn in view of applicant's cancellation of the claim, and applicant's response at pages 5-6 in the amendment filed September 9, 2005.

**Withdrawn-Claim Rejections - 35 U.S.C. § 102**

6. The previous rejection of claims 1, 2, 5, 7-9, 11 and 32-34 under 35 U.S.C. § 102(b) as being anticipated by Leitch *et al.* (Current Eye Research 19, 12-9 (July 1999)), is withdrawn in view of applicant's cancellation of the claim, and applicant's response at page 6 in the amendment filed September 9, 2005.

7. The previous rejection of claims 1-3, 6, 8, 9, 11 and 32-33 under 35 U.S.C. § 102(b) as being anticipated by Ellison *et al.* (J. Clin. Invest. 88, 1080-1091 (1991)), is withdrawn in view of applicant's cancellation of the claim, and applicant's response at page 6 in the amendment filed September 9, 2005.

8. The previous rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by Johnson (Egg Uses and Processing Technologies (1994), 177-191, edited by J. S. Sim & S. Nakai), is withdrawn in view of applicant's cancellation of the claim, and applicant's response at page 6 in the amendment filed September 9, 2005.

***New Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Nemori *et al.* (U.S. Patent 2003/0148399, filed September 23, 2002; PCT filed March 23, 2001).

Nemori *et al.* teach a composition comprising 10 g of conalbumin (another name for ovotransferrin, see paragraph [0007] of the specification) dissolved in 3 L of 0.5 M Tris·HCl buffer (pH 8.5) that contains 7 M urea and 10 mM EDTA (paragraph [0085]; claims 12 and 14). The term “for inhibiting bacterial biofilm on devices” is an intended use, which does give weight in a product claim, thus, the reference anticipates the claim invention.

***New Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Charter *et al.* (US 2002/0001582, published Jan. 3, 2002) taken with Johansen (WO 96/06532).

Charter *et al.* discloses a fungicidal composition comprising one or more “active ingredients” or “fungicides” which is selected from the group of avidin, lysozyme, ovotransferrin, chicken immunoglobulins, chitosan, polylysine, protamine, nisin, EDTA, rosemary, cinnamaldehyde, allicin and eugenol (paragraph [0073]; claim 12 and 14); and a method of treating plants, plant tissues and seeds that are infected with fungi, the method comprising contacting the plants, plant tissues and seeds with avidin in an effective amount to inhibiting fungi, and the composition may further comprise an effective amount of a compound

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selected from the group consisting of lysozyme, ovotransferrin, chicken immunoglobulins, chitosan, polylysine, protamine, nisen, EDTA, rosemary, cinnemaldehyde, allicin and eugenol (paragraph [0045]; claim 13). However, Charter *et al.* do not specifically teach the use of protamine sulfate in the composition.

Johansen discloses a bacteriocidal or fungicidal composition comprising a basic protein in combination with a cell-wall degrading enzyme or an oxidoreductase, where either protamine or protamine sulfate can be used as the basic protein (page 3, line 11-page 4, line 15).

At the time of invention was made, it would have been obvious that one of ordinary skill in the art is motivated to combine the two references to use protamine sulfate as the basic protein as taught by Johansen in preparing a fungicidal composition comprising one or more active ingredients including ovotransferrin and EDTA as taught by Charter *et al.* because both protamine and protamine sulfate exhibit optimum antimicrobial effect at alkaline pH, thus making such proteins suitable for incorporation in a composition for cleaning purposes (page 4, line 1-5 of WO 96/06532). Thus, the combined references result in the claimed invention and was, as a whole, prima facie obvious at the time the claimed invention was made

### ***Conclusion***

11. No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Min Kam whose telephone number is (571) 272-0948. The examiner can normally be reached on 8.00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached at 571-272-0931. The fax

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phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chih-Min Kam, Ph. D.  
Patent Examiner



**CHIH-MIN KAM**  
**PATENT EXAMINER**

CMK

December 5, 2005